

# Notice of Allowability

Application No.

09/653,413

Examiner

Joseph R. Maniwang

Applicant(s)

WILSON ET AL.

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## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 07/28/05.
2. ☒ The allowed claim(s) is/are 24,25,27,29,31,45-60 and 65-73.
3. ☒ The drawings filed on 23 December 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

MARC D. THOMPSON  
**MARC THOMPSON**  
PRIMARY EXAMINER

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Sally Ferrett (Reg. No. 46,325) on 08/08/05.
3. The application has been amended as follows:

#### **Claims:**

##### Claim 31:

A method of building and maintaining an object-oriented spatial database of worldwide geospatial data from at least two or more data formats, the method comprising:

instantiating objects of the object-oriented database, using at least two of Vector Product Format (VPF), Raster Product Format (RPF), Text Product Standard (TPS), Environmental System Research Institute (ESRI) shape, Generic Sensor Format (GSF), Naval Oceanographic Office text (NAVOCEANO), and temporal information databases; initializing spatial and non-spatial feature data of the object-oriented database;

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spatially indexing data among objects from the at least two VPF, RPF, TPS, ESRI, GSF, NAVOCEANO and temporal information databases into the single, object-oriented spatial database;

receiving from a client computer in the database network an area of interest from a visual image, representing active data objects, displayed on a computer on the network;

identifying to the client computer data available for the area of interest;

responsive to a request for the data, querying over the network data objects in at least one database associated with the area of interest;

receiving from at least one remote computer over the network data objects in the ~~object-oriented~~ at least one database associated with the area of interest and creating ~~and creating~~ an object-oriented database of geospatial data using object models;

transmitting a web-based applet to the client computer for viewing the data objects overlaid on a map display; and

converting two dimensional data objects to three dimensional data objects and displaying the converted three dimensional data objects,

wherein a three dimensional image is generated using digital terrain elevation data from an object oriented database on a remote computer and two dimensional feature data stored on a server and retrieved by the applet.

Claims 40-43 (cancelled).

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Claim 60:

A method of building and maintaining an object-oriented spatial database of worldwide geospatial data from at least two or more data formats, the method comprising:

instantiating objects of the object-oriented database, using at least two of Vector Product Format (VPF), Raster Product Format (RPF), Text Product Standard (TPS), Environmental Systems Research Institute (ESRI) shape, Generic Sensor Format (GSF), Naval Oceanographic Office text (NAVOCEANO), and temporal information databases;

initializing spatial and non-spatial feature data of the object-oriented database;

spatially indexing data among objects from the at least two VPF, RPF, TPS, ESI, GSF, NAVOCEANO and temporal information databases into the single, object-oriented spatial database;

receiving from a client computer in the database network an area of interest from a visual image, representing active data objects, displayed on a computer on the network;

identifying to the client computer data available for the area of interest;

responsive to a request for the data, querying over the network data objects in at least one database associated with the area of interest;

receiving from at least one remote computer over the network data objects in the object-oriented at least one database associated with the area of interest and creating ~~and creating~~ an object-oriented database of geospatial data using object models;

converting two dimensional data objects to three dimensional data objects using gridded, triangulated irregular network, and vector data; and  
transmitting a web-based applet to the client computer for viewing the data objects overlaid on a map display.

Claims 61-64 (cancelled).

***Allowable Subject Matter***

4. Claims 24, 25, 27, 29, 45-60, and 65-73 previously allowed. A corresponding reasons for allowance not included in this action can be found in a prior Office action.
5. Claims 31 and 60 are allowed.
6. The following is an examiner's statement of reasons for allowance:
7. The provision for building and maintaining an object-oriented spatial database of worldwide geospatial data from at least two or more data formats comprising instantiating objects of the object-oriented database, using at least two of VPF, RPF, TPS, ESRI, GSF, NAVOCEANO, and temporal information databases; initializing spatial and non-spatial feature data of the object-oriented database; spatially indexing data among objects from the at least two VPF, RPF, TPS, ESRI, GSF, NAVOCEANO and temporal information databases into the single, object-oriented spatial database; receiving from a client computer in the database network an area of interest from a visual image, representing active data objects, displayed on a computer on the network; identifying to the client computer data available for the area of interest; responsive to a

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request for the data, querying over the network data objects in at least one database associated with the area of interest; receiving from at least one remote computer over the network data objects in the at least one database associated with the area of interest and creating an object-oriented database of geospatial data using object models; transmitting a web-based applet to the client computer for viewing the data objects overlaid on a map display; and converting two dimensional data objects to three dimensional data objects and displaying the converted three dimensional data objects, wherein a three dimensional image is generated using digital terrain elevation data from an object oriented database on a remote computer and two dimensional feature data stored on a server and retrieved by the applet is not fairly taught or suggested by the prior art of record. Support for this functionality can be found in the Specification, p. 10, line 20 through p. 11, line 10; p. 19, line 31 through p. 20, line 13; p. 20, line 28 through p. 21, line 2; p. 25, line 22 through p. 26, line 12; p. 26, lines 21-29; Fig. 5, 6, 19.

8. The provision for building and maintaining an object-oriented spatial database of worldwide geospatial data from at least two or more data formats comprising instantiating objects of the object-oriented database, using at least two of VPF, RPF, TPS, ESRI, GSF, NAVOCEANO, and temporal information databases; initializing spatial and non-spatial feature data of the object-oriented database; spatially indexing data among objects from the at least two VPF, RPF, TPS, ESI, GSF, NAVOCEANO and temporal information databases into the single, object-oriented spatial database; receiving from a client computer in the database network an area of interest from a visual image, representing active data objects, displayed on a computer on the network;

identifying to the client computer data available for the area of interest; responsive to a request for the data, querying over the network data objects in at least one database associated with the area of interest; receiving from at least one remote computer over the network data objects in the at least one database associated with the area of interest and creating an object-oriented database of geospatial data using object models; converting two dimensional data objects to three dimensional data objects using gridded, triangulated irregular network, and vector data; and transmitting a web-based applet to the client computer for viewing the data objects overlaid on a map display is not fairly taught or suggested by the prior art of record. Support for this functionality can be found in the Specification, p. p. 10 line 20 through p. 11, line 10; p. 19, line 31 through p. 20, line 13; p. 20, line 28 through p. 21, line 2; p. 25, line 22 through p. 26, line 12; Fig. 5, 6.

9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph R. Maniwang whose telephone number is (571) 272-3928. The examiner can normally be reached on Mon-Fri 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JM

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